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TITLE: COLOR FILTER ARRAY

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ABSTRACT:

PURPOSE: To easily obtain the color filter array which has a high grade, is excellent in mass productivity and is large area by periodically changing the refractive index of a photosensitive resin film in a thickness direction and disposing interference filters in the form of mosaic or stripes.

CONSTITUTION: This color filter array is disposed with the many interference filters which consist of the film of a photosensitive resin film 3 and have the refractive index periodically changing in the thickness direction of the film and allow the transmission of the respective rays of the specific wavelength regions corresponding to the three primary colors (RGB) of light in the form of mosaic or stripes. The incident laser beams on a transparent photoresist 3 are reflected by the reflecting film and the two beams thereof generate standing waves. Two kinds of the layers varying in the

refractive index, therefore, exist eventually in the thickness direction and the optical thickness distribution thereof is controllable as desired by the wavelength, quantity and irradiation time of the incident light. This color filter arrays has the excellent grade, can display the good and bright color images, facilitates the formation to the larger area and has the excellent mass productivity. The excellent characteristics are obtd. in this way.

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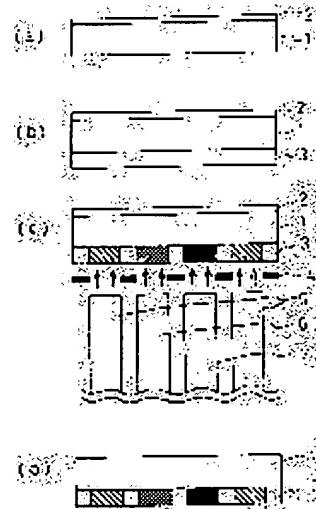
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(54) COLOR FILTER ARRAY

(57)Abstract:

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